Contents Volume 236 October 2001

Volume 236 No. 1

Growth response to subsurface soil acidity of wheat genotypes differing in aluminium tolerance
C. Tang, E. Diatloff, Z. Rengel and B. McGann **1–10**

Zinc accumulation by *Thlaspi caerulescens* from soils with different Zn availability: a pot study
S.N. Whiting, J.R. Leake, S.P. McGrath and A.J.M. Baker **11–18**

The relationships between static and dynamic variables in the description of root growth. Consequences for field interpretation of rooting variability
F. Lecompte, H. Ozier-Lafontaine and L. Pagès **19–31**

Effect of experimental phosphorus enrichment on oligotrophic tropical marshes in Belize, Central America
E. Rejmánková **33–53**

Simultaneous measurement of ammonium, nitrate and proton fluxes along the length of eucalypt roots
T.P. Garnett, S.N. Shabala, P.J. Smethurst and I.A. Newman **55–62**

Temporal and spatial distribution of roots and competition for nitrogen in pea-barley intercrops – a field study employing ^{32}P technique
H. Hauggaard-Nielsen, P. Ambus and E.S. Jensen **63–74**

Influence of broadleaf trees on soil chemical properties: A retrospective study in the Sub-Boreal Spruce Zone, British Columbia, Canada
P. Sanborn **75–82**

Farming system-induced variability of some soil properties in a sub-humid zone of Ghana
L. Atsivor, G.N. Dowuona and S.G.K. Adiku **83–90**

Estimating seasonal and annual carbon inputs, and root decomposition rates in a temperate pasture following field ^{14}C pulse-labelling
S. Saggar and C.B. Hedley **91–103**

Effects of soil air-filled porosity, soil matric potential and soil strength on primary root growth of radiata pine seedlings
C. Zou, C. Penfold, R. Sands, R.K. Misra and I. Hudson **105–115**

Cuticular penetration of potassium salts: Effects of humidity, anions, and temperature
J. Schönherr and M. Luber **117–122**

Interactive effects of boron and salinity stress on the growth, membrane permeability and mineral composition of tomato and cucumber plants
M. Alpaslan and A. Gunes **123–128**

Volume 236 No. 2

Effects of elevated nickel and cadmium concentrations on growth and nutrient uptake of mycorrhizal and non-mycorrhizal *Pinus sylvestris* seedlings
U. Ahonen-Jonnarth and R.D. Finlay **129–138**

Non-litter effects of elevated CO_2 on forest floor microarthropod abundances
R.A. Hansen, R.S. Williams, D.C. Degenhardt and D.E. Lincoln **139–144**

Effects of a fraction from maize root exudates on haploid strains of *Sporisorium reilianum* f. sp. *zeae*
C. Martinez, M. Buée, A. Jauneau, G. Bécard, R. Dargent and C. Roux **145–153**

Contribution of vines to the evapotranspiration of a secondary forest in eastern Amazonia
T.G. Restom and D.C. Nepstad **155–163**

Radiation and soil temperature interactions on the growth and physiology of eastern white pine (*Pinus strobus* L.) seedlings
J.-F. Boucher, P.Y. Bernier and A.D. Munson **165–174**

Source of the soybean N credit in maize production
L.E. Gentry, F.E. Below, M.B. David and J.A. Bergerou **175–184**

Effects of preplant inoculation of apple (*Malus domestica* Borkh.) with arbuscular mycorrhizal fungi on population growth of the root-lesion nematode, *Pratylenchus penetrans*
T. Forge, A. Muehlchen, C. Hackenberg, G. Neilsen and T. Vrain **185–196**

Effect of nitrogen and light on nutrient concentrations and associated physiological responses in birch and fir seedlings
C.A. Evans, E.K. Miller and A.J. Friedland **197–207**

Improving fertiliser efficiency on calcareous and alkaline soils with fluid sources of P, N and Zn
R.E. Holloway, I. Bertrand, A.J. Frischke, D.M. Brace, M.J. McLaughlin and W. Shepperd **209–219**

Morphological synergism in root hair length, density, initiation and geometry for phosphorus acquisition in *Arabidopsis thaliana*: A modeling approach
Z. Ma, T.C. Walk, A. Marcus and J.P. Lynch **221–235**

QTL × N-level interaction for plant height in rice (*Oriza Sativa* L.)
P. Fang and P. Wu **237–242**

Root hairs confer a competitive advantage under low phosphorus availability
T.R. Bates and J.P. Lynch **243–250**

Augmentation of AM fungi fails to ameliorate the adverse effects of temporal resource variation on a lettuce crop
E.S. Berg, G.K. Eaton and M.P. Ayres **251–262**

Field observations on nitrogen catch crops. III. Transfer of nitrogen to the succeeding main crop
J. Vos and P.E.L. van der Putten **263–273**

Comparison of acid and alkaline soil and liquid culture growth systems for studies of shoot and root characteristics of white lupin (*Lupinus albus* L.) genotypes
S.J. Kerley and C. Huyghe **275–286**

Instructions for authors **287–293**

Author index **295**

Volume contents **297–299**